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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,173 09/08/2003		09/08/2003	Kai-Te Chen	JCLA10431	3339
23900	7590	12/16/2004		EXAM	INER
J C PATEN	•		VY, HUNG T		
4 VENTURE, SUITE 250 IRVINE, CA 92618			ART UNIT	PAPER NUMBER	
, c.				2821	
			DATE MAILED: 12/16/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

•		$A \mathcal{U}$
<u> </u>	Application No.	Applicant(s)
	10/658,173	CHEN ET AL.
Office Action Summary	Examiner	Art Unit
	Hung T Vy	2821
The MAILING DATE of this communication eriod for Reply	appears on the cover sheet	with the correspondence address
A SHORTENED STATUTORY PERIOD FOR RETHE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, and a lift NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by so any reply received by the Office later than three months after the meanned patent term adjustment. See 37 CFR 1.704(b).	ON. FR 1.136(a). In no event, however, may and a reply within the statutory minimum of the eriod will apply and will expire SIX (6) MO statute, cause the application to become a	a reply be timely filed nirty (30) days will be considered timely. ONTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).
tatus		
1) Responsive to communication(s) filed on _		
·	This action is non-final.	
3) Since this application is in condition for allo		itters, prosecution as to the merits is
closed in accordance with the practice und	·	•
isposition of Claims	·	
4) Claim(s) 1-16 is/are pending in the applica	tion.	
4a) Of the above claim(s) is/are with	drawn from consideration.	
5) Claim(s) is/are allowed.		•
6)⊠ Claim(s) <u>1-16</u> is/are rejected.		•
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction ar	nd/or election requirement.	
pplication Papers		
9) The specification is objected to by the Exam	miner.	
10) The drawing(s) filed on is/are: a)	accepted or b) objected to	by the Examiner.
Applicant may not request that any objection to	the drawing(s) be held in abeya	ance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the co	rrection is required if the drawin	g(s) is objected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the	e Examiner. Note the attache	ed Office Action or form PTO-152.
riority under 35 U.S.C. § 119	•	•
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of:		§ 119(a)-(d) or (f).
1. Certified copies of the priority docum2. Certified copies of the priority docum		Application No.
2. Certified copies of the priority docum3. Copies of the certified copies of the priority docum		
application from the International Bu		in received in this National Stage
* See the attached detailed Office action for a		ot received.
	or and opino no	
tachment(s)		
tachment(s) Notice of References Cited (PTO-892)	4) Interview	Summary (PTO-413)
) Paper No	Summary (PTO-413) o(s)/Mail Date Informal Patent Application (PTO-152)

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4)

DETAILED ACTION

Specification

1. The specification has been checked to the extent necessary to determine the presence of possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraph of 35 U.S.C. § 102 in view of the AIPA and H.R. 2215 that forms the basis for the rejections under this section made in the attached Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 35 U.S.C. § 102(e), as revised by the AIPA and H.R. 2215, applies to all qualifying references, except when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. For such patents, the prior art date is determined under 35 U.S.C. § 102(e) as it existed prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. § 102(e)).

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3. Claim 1, 4-5, 8 -10, 13 and 16 are rejected under 35 U. S. C. § 102 (e) as being anticipated by Jo et al., U.S. pub. No. 2003/0117325.

Regarding claims 1 and 5, Jo et al. disclose an antenna on a printed circuit board (PCB) with a compensating capacitor, the antenna comprising: a radiator (24,26 or 104, 102) disposed over a first surface of the PCB (See paragraph 0034), wherein the radiator (10) includes a short circuit stub section (15), a signal feeding section (14), and a tuning section coupled together at a joint (see fig, 2,313,14, and 15), wherein the tuning section includes a bending portion (see fig, 2,313,14, and 15); a signal feeding line (18), disposed on the first surface of the PCB (20) and electrically coupled to the radiator at the signal feeding section of the radiator (10) (see fig. 1 and paragraph 0034); and a ground layer (12), disposed on a second surface of the PCB (20), one terminal of the short circuit stub section (15) being electrically coupled to the ground layer (15)(See fig. 1-3), wherein the bending portion (26,24) of the tuning section is overlapping with the ground layer (12) to form the compensating capacitor (see paragraph 0048, 0070).

Claims 4 and 8, Jo et al. disclose the bending portion of the tuning section extends crossing over an edge of the ground layer (See fig. 2,313,14, and 15).

Claims 9-10, 13 and 16, the methods for forming an antenna on a printed circuit board (PCB), since Jo et al. disclose the product, it is inherent a product by process for performing the method is recited in the claims.

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Claim Rejections - 35 U.S.C. § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth insection 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-3, 6-7, 11-12, and 14-15 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Jo et al., U.S. Pub. No. 2003/0117325 in view of Ngounou Kouam et al., U.S. Patent No. 6,606,062.

Claims 2-3, 6-7, 11-12 and 14-15, Jo et al. disclose all limitations of claim except for the ground layer includes a protruding portion from an edge. However, Ngounou Kouam et al. disclose the ground layer includes a protruding portion from an edge (4), wherein the protruding portion is at least overlapping with antenna (34)(See fig. 1). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Jo et al. to have overlapping with the bending portion of the tuning section by Ngounou Kouam et al. The motivation of doing so would have been to provide the protruding portion in order to reduce the overall size of the antenna (See column 7, line 23-27).

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Conclusion

5. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist the examiner to locate the appropriate paragraphs.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Vy whose telephone number is (571) 272-1954. The examiner can normally be reached on Monday-Friday 8:30 am - 5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 308-7722 for After Final communications.

Information regarding the status of an application may be obtained from the patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either private Pair or Public Pair. Status information for unpublished applications is available through Private Pair only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hung T. Vy Art Unit 2828 December 10, 2004 Art Unit: 2821

Don Wong Supervisory Patent Examiner Technology Center 2800